

Washington Park Arboretum

BULLETIN



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CONTENTS

- 2** Pacific Connections—At Last!
—*Paige Miller*
- 3** Enter the Entry Gardens—The Plants
of the Pacific Connections Garden,
Phase 1—*Niall Dunne and Randall
Hitchin*
- 9** Versatile Euphorbias—Timothy Walker
- 16** *Malus*: A Four-Season Wonder for
Pacific Northwest Gardens—Loreene
Edwards Forkner
- 20** Knowing the Spring Courtyard: The
Seattle Chinese Garden Begins to Take
Shape—Phil Wood
- 24** What is the Difference Between
Japanese and Chinese Gardens?—
Gang Chen
- 30** IN A GARDEN LIBRARY: New Books
from Pacific Northwest Writers—
Brian Thompson



ABOVE: The Seattle Chinese Garden's ceremonial entry gate is a gift of Chongqing, Seattle's Chinese sister-city. The gate is part of the Knowing the Spring Courtyard, the Chinese Garden's latest building project. Read more about the Knowing the Spring Courtyard beginning on page 20. (Image: Chongqing Municipal Bureau of Parks and Greenery)

ON THE COVER: A member of the Hamamelidaceae family and a native of the southeastern U.S., the *Fothergilla* genus features glorious fall foliage. Visit the Arboretum's specimens of *Fothergilla major* at grids 4-5 E, 7-5 E and 32-E. (Photo: Rizaniño H. Reyes)

Pacific Connections—At Last!

*A*s this “Bulletin” arrives in your mailbox, we at the Arboretum will have just celebrated the completion of the first phase of our long-awaited Pacific Connections Garden project. Our partners, donors, volunteers and close friends will have gathered to tour the gardens and receive our thanks for making possible this major new exhibit in the Arboretum, and the public will have arrived for the ribbon cutting to ogle and to see our handiwork.

But, as I write, it is a mild mid-summer day, and those celebrations are still weeks off. So, Niall Dunne and I went out to walk the site today to check on the progress of the construction and show it off to our new development director, Helen Payton. Together, we three went there to imagine the finished gardens.

As we approached, we spied Andy Sheffer, the project manager, and Milenko Matanovic, artist and leader of the Pomegranate Center, in the new interpretive shelter discussing the final finish work for the shelter’s great, carved Western red cedar columns. What luck to find them there and be able to thank them for their great work on the project.

We gazed from the shelter at the concrete curbs already in place for the circular path



Mature forests in the completed Pacific Connections Garden.

around the meadow, and beyond them to the work crews as they finished grading the meadow. Any day now they will be laying the sod that will welcome our many public visitors.

We checked out the few plants already in place, including Chile’s signature monkey puzzle tree (which is sprouting new growth and looking none the worse for its journey from a Ballard parking strip), and we imagined the layouts of each of the five gardens—Australia, New Zealand, China, Chile and Cascadia.

And then we walked the new paths into the future Cascadia forest: up to the circular stone bench at the Overlook site and down the slope on the switch-backed path, admiring the handsome new rock walls as we went along to the sunny, south-facing terrace. That terrace is now planted with the hardy native trio of salal, sword fern and mahonia to stabilize the slope, but one day this spot will feature plants indigenous to the Siskiyou Range.

Just as our minds’ eyes could see the finished meadow and entry gardens that will be done this fall, we could also imagine the future Cascadia forest—although it will not be planted by then. While its paths and walls are already built, the first Siskiyou plant material has just been collected and sprouted; it will take another year or two to grow before it can be planted out. And, in that time, we will be working to raise the funds to make that planting possible.

If garden making takes imagination, patience and optimism, forest-making takes all these in even greater measure. So, this fall we celebrate how far we have come, and we plan and dream about how much better it all will be in the future. ~

Cheers to you all,

Paige Miller, Executive Director,
Arboretum Foundation

IMAGE COURTESY THE BERGER PARTNERSHIP. RENDERING BY MIKE KOWALSKY

Enter the Entry Gardens

THE PLANTS OF THE PACIFIC CONNECTIONS GARDEN, PHASE 1

BY NIALL DUNNE AND RANDALL HITCHIN



This fall sees the historic grand opening of Phase 1 of the Pacific Connections Garden, sited at the south end of Washington Park Arboretum. Phase 1 includes the Garden's central welcoming meadow and interpretive shelter and the main trail leading from the meadow through the future Cascadia forest. For plant lovers, the main draw will be the series of intricately designed entry gardens surrounding the meadow. The five mixed

borders—ranging from 80 to 180 feet wide and from 40 to 60 feet deep—are beautiful botanical vignettes, offering previews-in-miniature of what is to come in the Garden's five Pacific Rim immersion forests.

They are also wonderful exhibits in and of themselves, featuring not only choice specimens of the temperate climate species from Chile, China, New Zealand, Australia and Cascadia that will populate the forests—but

ABOVE: Iconic plants in the new entry gardens of the Pacific Connections Garden. *Clockwise from upper left:* New Zealand's *Phormium tenax* (New Zealand flax), Cascadia's *Thuja plicata* (Western red cedar), Chile's *Araucaria araucana* (monkey puzzle tree) and Australia's *Eucalyptus* species (gum tree). *Center:* China's *Ginkgo biloba* (maidenhair tree).

also ravishing, cultivated selections of these species. Like the Witt Winter Garden and the Japanese Garden, the new entry gardens can be thought of as focal points of pure ornamental design in Washington Park Arboretum. As they mature and fill in over time, they will become part of the Arboretum's rich legacy of formal horticultural display.

The following article provides a close-up look at the entry gardens by highlighting aspects of their design and profiling some of the fabulous plants that you will see in them. It will also briefly look ahead to Phase 2 of the Pacific Connections Garden project, which is already getting underway.

New Zealand

Let's begin at the north end of the welcoming meadow, where you will find the New Zealand entry garden, a fanciful recreation of an indigenous scrub-forest edge or clearing. This garden places a strong emphasis on brightly colored and contrasting foliage. Airy, broadleaved evergreen trees form the backdrop of the display and provide a striking foil for the large, strappy, colorful evergreen monocots that predominate in the understory.

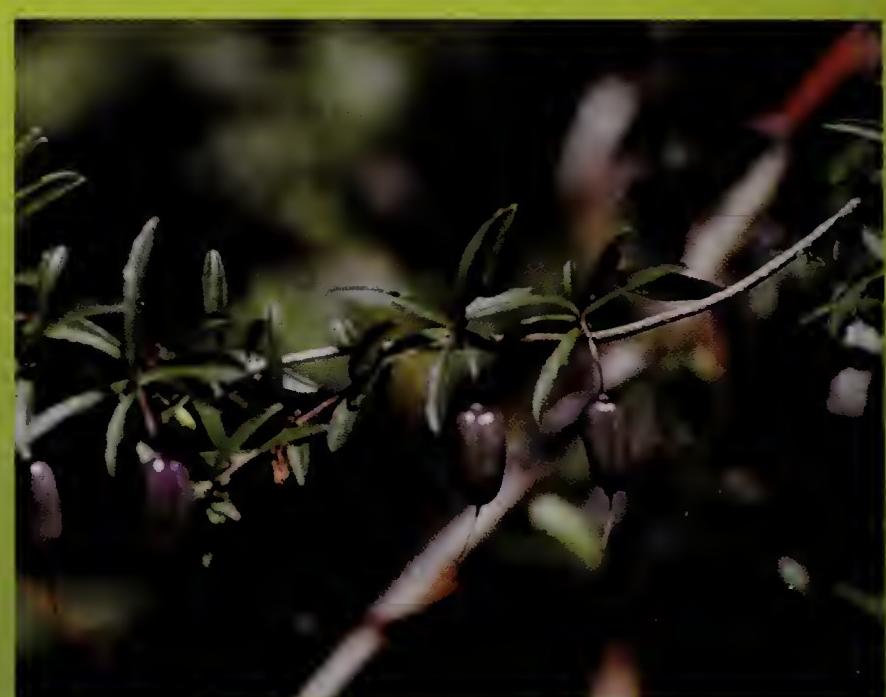
Canopy trees include long-leaved lacebark (*Hoberia sexstylosa*), a small, multi-stemmed evergreen tree from the Hollyhock family

(Malvaceae) that grows up to 24 feet tall and produces long, glittering, deeply incised leaves that are light green. In summer, one-inch wide, pink-centered fragrant flowers hang in clusters among the leaves; later, they develop into broadly winged, purple seed pods. Several cultivars of *Pittosporum tenuifolium* also frame the garden and separate it from the adjoining China display on the west side of the meadow. Known as *tawhiwhi* by the Maori, *P. tenuifolium* is another small tree, growing up to 30 feet tall. The leaves are glossy and pale green and often have wavy margins. Clusters of small, bell-shaped purple flowers appear in late spring and give off a delicious honey scent, especially towards evening time.

An explosion of *Phormium* (New Zealand flax)—both straight species and variegated forms—takes place in the shrub layer. Cultivars include *P. 'Yellow Wave,'* which grows four to five feet tall and boasts two and one-fourth-inch wide chartreuse leaves with lime-green margins, and *P. 'Maori Chief,'* which grows a foot taller and produces slightly larger green leaves with rosy edges. Other spiky monocots in the understory include the arresting *Astelia nivicola 'Red Gem,'* from New Zealand's South Island. Growing one foot high, it forms tufts of broad, silvery foliage, with a strong, red



The China entry garden in the Pacific Connections Garden will feature the stunning spring blooms of *Magnolia wilsonii*.



Billardiera longiflora (climbing blueberry) is an evergreen vine that will knit together trees and shrubs in the Australia entry garden.

flush that deepens with cold weather, particularly at the base. Spikes of small, cream-colored flowers appear in spring followed by exquisite orange berries on female plants.

Dicots are featured in the understory, including a number of great *Veronica* (*Hebe*) species. *Veronica topiaria*, for instance, is a wonderful accent plant. It grows up to three feet tall and forms a tight dome of half-inch-long gray-green foliage; small spikes of bright white flowers sit atop the plant in summer. There's also the extraordinary *Veronica ochracea*, which—because of its scaly, arching, light-green leaves—has the appearance of a low-growing conifer. But there's no mistaking the plant's angiosperm credentials when it puts out lovely white flower spikes in summer.

Australia

Moving clockwise or eastward around the welcoming meadow—and crossing over Arboretum Drive East (just pretend you're traversing the Tasman Sea!)—you arrive at the entry garden for Australia. Like the New Zealand border, this display features an airy canopy and understory dominated by broadleaved evergreens; however, the foliage palette is different, consisting primarily of blues, grays and gray greens. The foliage provides a shimmering backdrop to a season-

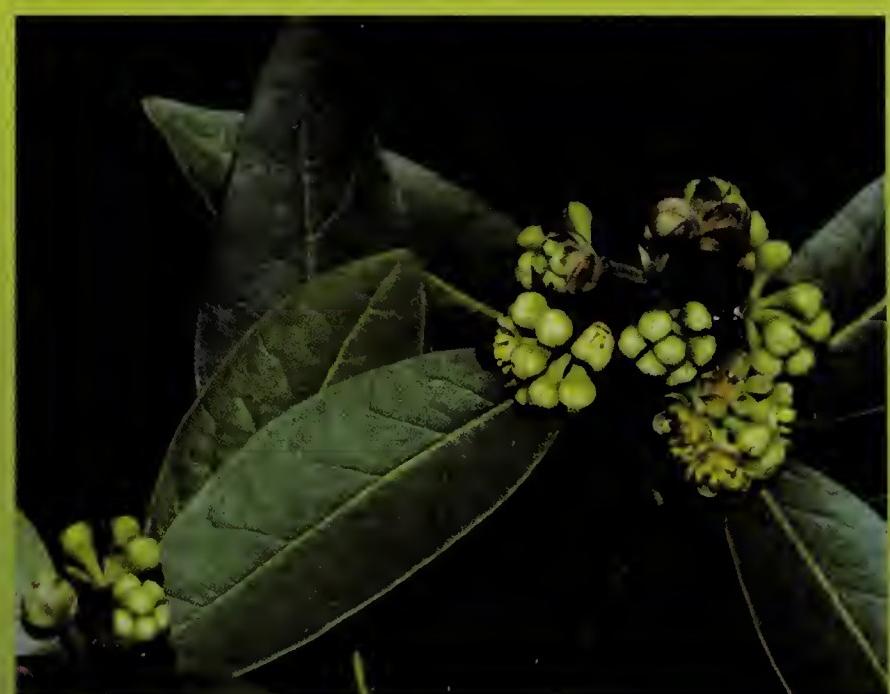
long succession of splashy floral pageantry.

The canopy consists of large, wonderfully architectural *Eucalyptus* species, namely *E. glaucescens* (Tingiringi gum), with its peeling white bark and narrow, sweetly scented, silvery gray-green leaves, and *E. pauciflora* (snow gum), with its smooth, ghostly white trunk and long, narrow, gray-green leaves. These are accompanied by small trees such as the densely branched *Acacia pravissima* (Ovens wattle), which grows up to 20 feet tall, produces small, triangular, gray-green foliage, and dons a spectacular coat of powder-puff, bright-yellow flowers in early spring.

In the shrub layer down under (pardon the pun!), you'll find a diverse selection of evergreen flowering shrubs, including the delightful *Callistemon pallidus* (lemon bottlebrush), which grows up to 15 feet and produces narrow bluish-green leaves. In late spring to early summer, it flaunts one- to three-inch-long spikes of creamy-yellow flowers. Two *Grevillea* species are particularly noteworthy: *G. victoriae*, which grows six feet tall and produces elliptic, silvery foliage (reminiscent of an olive), and *G. juniperina* 'Molonglo,' a low-growing selection with bright-green, needle-like leaves. Members of the protea family (Proteaceae), *Grevillea* species bear fabulous, long, spidery blossoms. The flowers of *G. victoriae* are



Cascadia's *Fuchsia magellanica* features hummingbird-attracting blooms.



Umbellularia californica (California bay laurel) is a small broadleaved evergreen shrub that will thrive in the Cascadia entry garden.



The New Zealand forest is part of Phase 2 of the Pacific Connections Garden.

coppery red, while those of ‘Molonglo’ are a subtle, soft yellow.

Also in the understory—creeping along the ground or weaving through the shrubs—you’ll find the unusual *Billardiera longiflora*, or climbing blueberry. Native to New South Wales and Tasmania, this evergreen vine features lance-shaped, dark-green leaves and yellow, trumpet-shaped summer flowers. Small, apple-like, blue-violet to purple berries festoon the vine in fall.

Cascadia

On the south end of the welcoming meadow is the Cascadia entry garden—a lush, dense, dark-green forest planting. The canopy is strongly slanted towards coniferous evergreen trees, reflecting the prominence and diversity of these plants in our native flora. Small broadleaved trees, showy shrubs and herba-

ceous perennials in the understory add flashes of flower color and contrasting foliage texture to the canvas of dark green.

A column of iconic, large Pacific Northwest conifers—including Western red cedar (*Thuja plicata*) and mountain hemlock (*Tsuga mertensiana*)—frame the garden. Also present is Brewer’s weeping spruce (*Picea breweriana*), a Siskiyou native that develops a striking, pendulous form as it matures. Interweaving between the conifers are broadleaved evergreens such as *Umbellularia californica*, the California bay laurel, with its long, narrow, yellow-green glossy leaves (which can be used in cooking as a substitute for sweet bay). Three cultivars of the vine maple (*Acer circinatum*) are planted at the head of the trail that bisects the entry garden and leads to what will eventually become the Cascadia forest. This small maple has broad,

palmately lobed leaves that turn a gorgeous orange-tinged red in autumn.

Cultivars of native mahonia (*Berberis* species) and red flowering currant (*Ribes sanguineum*) fill the shrub layer and provide impressive floral fireworks from late winter to early spring. Six cultivars of the flowering currant have been planted, including white ('White Icicle'), pink ('Strybing Pink') and red ('Pulborough Scarlet') selections. Bolstering this early season flower extravaganza is *Garrya x issaquahensis* 'Pat Ballard,' a showy selection of the hybrid silk tassel (a cross between *G. elliptica* and *G. fremontii*). This tall shrub produces elliptical, wavy-edged, dark-green foliage and stunning 12-inch mauve catkins, which hang from the branch tips like icicles in wintertime. Later on in spring, the beautiful Western azalea (*Rhododendron occidentale*)—a large deciduous shrub, growing up to 15 feet tall—will chime in with bright clusters of fragrant, two-inch, white flowers splashed with pink and/or yellow.

Snaking through the foreground of the Cascadia entry garden is a wet swale, which has been planted with riparian and wetland species such as native *Juncus* and *Carex*. Here also, you'll find specimens of the spectacular umbrella plant (*Darmera peltata*), which produces one- to two-foot-wide umbrella-like leaves on two- to six-foot stalks and bears round clusters of bright-pink flowers on tall spikes in spring.

Chile

Wedged between Cascadia and China at the southwestern tip of the welcoming meadow is the Chile entry garden. Like Cascadia, this display features a lush green forest canopy with a brightly contrasting shrub layer; but it is distinguished from the latter by a predominance of broadleaved evergreens (rather than conifers) in the canopy layer. Conifer specimens, such as a handsome plum pine (*Podocarpus salignus*) and a now-famous monkey puzzle tree (*Araucaria araucana*)—

the first new accession into the Pacific Connections Garden—are certainly present, but play second fiddle to the broadleaved Chilean fire tree (*Embothrium coccineum*), Chilean lantern tree (*Crinodendron hookerianum*) and boxleaf azara (*Azara lanceolata*).

The dazzling Chilean fire tree has been celebrated elsewhere in these pages (see "Immerse Yourself in a Chilean Forest," by Sarah Reichard; "Bulletin," Winter 2008). A lesser-known beauty is the Chilean lantern tree, a small evergreen growing up to 15 feet tall and producing narrow, glossy, sharply toothed dark-green leaves. In late spring, large, pendulous scarlet flowers hang from its branches like tasty-looking cherries, or beautiful painted lanterns. Boxleaf azara is somewhat better known. It features small, shiny, paddle-like dark-green leaves neatly arranged on stiff, herringbone-patterned branches. In winter, abundant, fluffy, apetalous yellow flowers are held in clusters in the leaf axils and emit a strong fragrance reminiscent of sugar cookies, vanilla and chocolate. Yum!

Let your gaze descend into the understory and you'll find the shrub layer fizzing with fabulous cultivars of *Fuchsia magellanica*, including yellow-leaved and variegated forms. Showy fuchsia flowers bloom profusely from late spring to first frost and range in color from the standard red and violet to soft pinks and whites. Other delights in the shrub layer include *Eucryphia glutinosa* 'Nana,' which grows up to three feet tall and features handsome, toothed oval leaves. In late summer, the plant is covered with chalice-shaped white flowers, each bearing a dense tuft of stamens. Also, look for the unusual *Hydrangea serratifolia*, a climbing evergreen hydrangea that uses suction pads to hoist itself into the canopy and produces sprays of bright, white flowers in summer.

And how could we neglect to mention *Ugni molinae*—which, in spite of its less-than-promising generic name, is a real showstopper! Commonly known as the Chilean guava, this

shrub grows up to six feet tall and produces attractive, glossy, bronze-tinted leaves. Pendant, urn-shaped, cream-colored flowers hang from the leaf axils in mid-to late spring and develop into lovely, small, maroon berries, which taste—as advertised—like little guavas. Yum yum!

China

Continuing clockwise around the meadow, you arrive at the China entry garden, which includes the interpretive shelter (see “The New Pacific Garden Interpretive Shelter,” by Elizabeth Loudon; “Bulletin,” Spring 2008). In comparison to the other four displays, this one looks a lot more like a traditional “garden” than a naturalistic recreation of a particular native vegetation type. That’s because the plants were sampled widely from across China and chosen mainly for their cultural importance—their significance as culinary, medicinal and ornamental crops.

Anchor plants include the dove tree (*Davida involucrata* ‘Sonoma’), with its heart-shaped, vivid-green leaves and large, pure-white flower bracts, which hang in rows beneath the branches in spring and flutter like white doves when the wind kicks up. They also include ginkgo (*Ginkgo biloba*)—with its distinctive fan-shaped leaves and fleshy, yellow edible seeds—and Wilson magnolia (*Magnolia wilsonii*), famed for its large, pendulous, sweet-smelling, pink spring flowers. Both species have a long history of use in the traditional Chinese pharmacopeia.

A grove of sweet-shoot bamboo (*Phyllostachys dulcis*) compartmentalizes the garden from the New Zealand display to the north. This timber bamboo produces marvelous, tall (up to 40 feet), three-inch-wide, sinuous canes and masses of large, drooping, pale-green leaves. As the common name suggests, the young shoots are very sweet tasting and can be eaten raw. (Other edible bamboos need to be parboiled to remove bitterness prior to consumption.)

In the forefront of the garden, you’ll find such treats as *Paeonia suffruticosa* ssp. *rockii*, probably the most sought after tree peony of all time. In early summer, it produces jaw-dropping, four-inch-wide, frilly, white-petaled flowers with maroon and yellow centers. There’s also *Rhododendron sinogrande*, which boasts the largest leaves of any rhodie—up to a meter long!—and large trusses of white to pale-yellow, late-spring blossoms. And the Chinese chain fern, *Woodwardia unigemmata*—a lovely plant with rose-copper-colored new fronds. The list of botanical beauties goes on.

Pacific Connections, Phase 2

Now that Phase 1 of the Garden is complete, the Arboretum is moving ahead with Phase 2 of the project, which includes the designing and planting of the Cascadia and New Zealand immersion forests, and the restoration of the Hohmdahl rockery. The rockery, located at the south junction of Arboretum Drive East and Lake Washington Boulevard, will be planted with eye-catching Chilean species and signal to motorists and passersby that something new and wonderful is afoot in the Arboretum.

Seattle Parks and Recreation and the University of Washington Botanic Gardens have hired the Seattle-based Berger Partnership to create the designs for Phase 2. As this article goes to press, Berger has already created some spectacular concept drawings for the Cascadia and New Zealand forests. The firm will also help calculate the cost of materials and maintenance for the project so that the Arboretum Foundation can fine-tune its funding-raising campaign and help bring the next phase of this exciting endeavor to fruition. ~

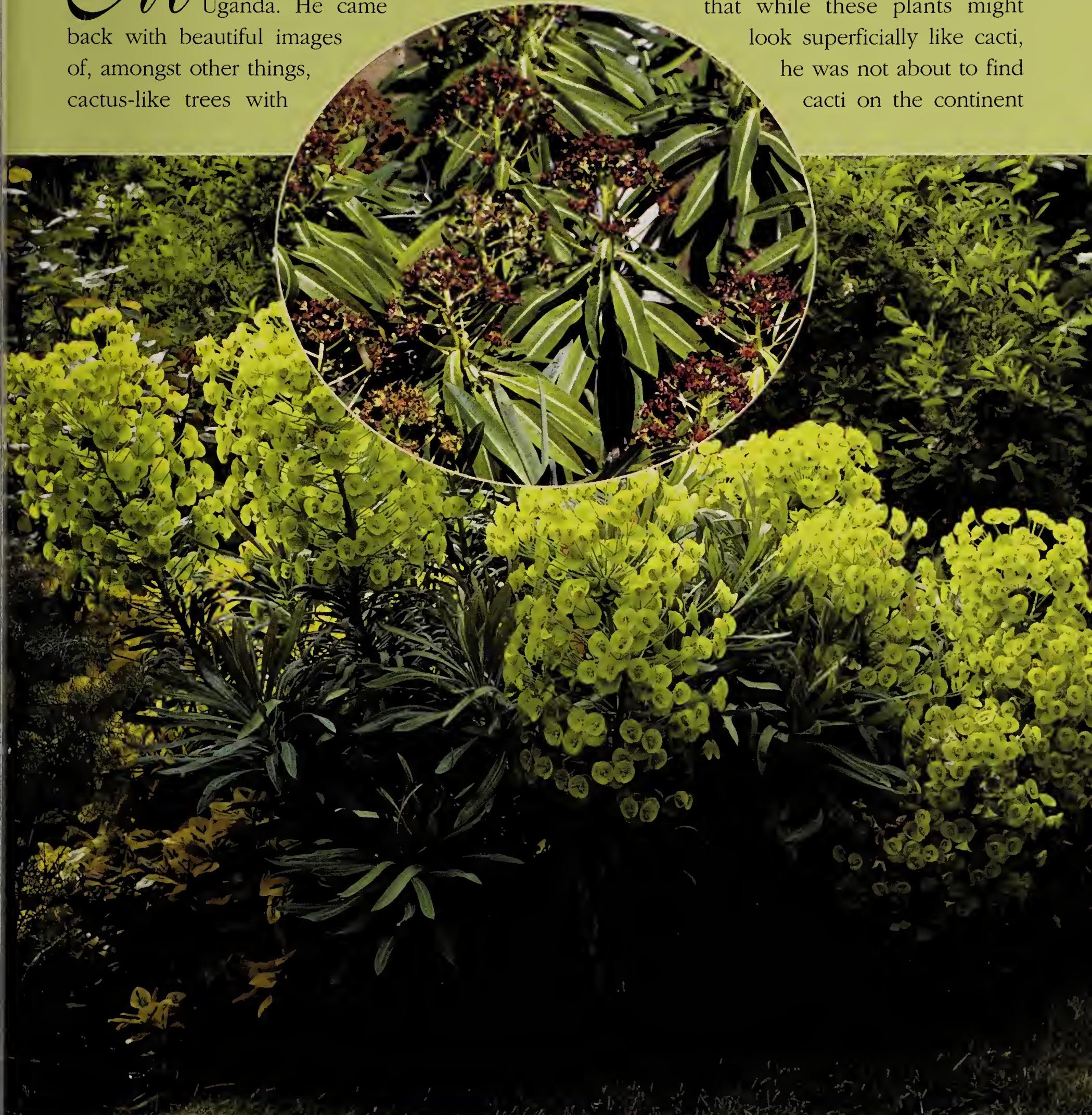
NIALL DUNNE is communications manager at the Arboretum Foundation and a member of the “Bulletin” editorial board. **RANDALL HITCHIN** is the plant collections manager for the University of Washington Botanic Gardens and a botanical editor for the “Bulletin.”

Versatile Euphorbias

STORY AND PHOTOS BY TIMOTHY WALKER

*M*y nephew has just returned from a pre-college expedition to Uganda. He came back with beautiful images of, amongst other things, cactus-like trees with

huge candelabra. His Uncle Timothy took a great deal of trouble to convince him that while these plants might look superficially like cacti, he was not about to find cacti on the continent



ABOVE: *Euphorbia characias* ssp.*wulfenii*

INSET: *Euphorbia mellifera*

of Africa. He'd have to go to America if he wanted to see them.

The plants were, in fact, euphorbias. The similar appearance of cacti and euphorbias is an excellent example of convergent evolution, where two very distantly related groups of plants look similar because they have evolved the same adaptations to their environments—in this case, to living in an arid area. It is also proof, if proof were needed, that when it comes to identifying plants you must have the flowers and fruits. The flowers of cacti are generally big, colorful structures, while euphorbia flowers are subtle to the point of being boring.

Fish Kills and Lemon Wax

The Greek physician Dioscorides (c. 90–40 B.C.E.) first used the name “euphorbia” to label a succulent plant from Mauritania. The

sap of this plant had been used by his contemporary, Euphorbus, physician to King Juba of Mauritania, to burn warts off the hands of the king. In addition to the caustic sap, the plant has spines in pairs on the ridges of its swollen, leathery stem. When it produces flowers, these paired spines emerge from within small, beaker-like structures, around the rims of which are yellow, circular glands. Neither sepals nor petals are in evidence.

Besides the medicinal properties of euphorbia sap, fishermen in parts of central Africa exploit its toxicity to stun and kill fish. A bleeding branch thrown into a river will cause fish and other river dwellers to obligingly float to the surface. The sap, which lacerates the gills of fish, kills them so fast that their meat is safe to eat. The sap is equally toxic to water snails, and research currently is underway to use it to control a



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snail that is the alternate host for a particularly nasty human parasite. Further south, in Namibia, locals use the sap for quite a different purpose. "Locals" in this case are the rhinos. Before males go looking for a mate, they brush their groins against the spineless euphorbia bushes, covering their genitals with the sap. This, apparently, makes them irresistible to their female friends!

Besides those found in Africa, more than a thousand species of succulent euphorbias grow around the world. The hydrocarbons of an Indian species are being investigated as a possible source of bio-diesel, and the wax from a Central American species is the origin of candelilla wax, which is used to coat lemons.

Spurges and Euphorbias

Temperate gardeners are often surprised that there is a close relationship between these

succulent plants and the splendid spurges that are an invaluable part of our garden flora. Some of the succulent species are of Mediterranean origin, and they were well known to Dioscorides and the earlier Greek botanist Theophrastus. However, neither botanist made the connection between the leafy herbs, or spurges, and the woody succulents, or euphorbias. And so they referred to the spurges as *Tithymalus*. Plants from further north, with a similar appearance, were called *Esula*. It was not until Linnaeus tried his hand at classifying plants—by noting how many stamens, ovaries and ovules they possessed—that the relationship became clear. (It must be noted that this does not always give the right results, but it did for euphorbias.) It was Linnaeus who put all the species of *Tithymalus* and *Esula* into the now huge genus *Euphorbia* that today contains



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nearly 2,000 species; possibly only *Astragalus* has more.

The sap of the non-succulent species is exploited almost to the same extent as that of its succulent cousins. Very importantly, it is being investigated as a possible treatment for a particular form of leukemia. Many people relate how their grandmothers used

the sap for the same purpose as Euphorbus did, namely to remove warts and other skin blemishes, such as moles. The plants should have become known as "wartwort," as the term "wort" is an archaic word meaning plant. But this sounded rather silly, and the name molewort was adopted instead. Unfortunately, this name has proved ambiguous, and now

LEFT: *Euphorbia stygiana*

BELLOW: *Euphorbia × pasteurii*



some people claim that if the caper spurge (*Euphorbia lathyris*) is planted in and around your garden, the charming little mammals that aerate your lawn will not visit you. We certainly have no moles in the University of Oxford Botanic Garden, but I suspect that the absence of moles has more to do with our 14-foot high walls with nine-feet-deep foundations than it has to do with a few herbs.

In addition to these practical uses, euphorbias have ornamental value in the garden. There is a spurge for every situation and, as garden writer and designer Beth Chatto points out, they bring a unique color to the garden. Defining that color is tricky, since it varies from species to species, and from red to orange in some. The plantsman Nori Pope used to call it chartreuse, which is good enough for me because a bottle of green Chartreuse left in the sunlight slowly fades to yellow. And, when the bottle is empty, you can throw it at the moles as they dig up your prize lawn—though by then perhaps you won't care about the lawn.

The Euphorbia Collection at the University of Oxford Botanic Garden

The University of Oxford Botanic Garden is home to a National Plant Collection of hardy euphorbias that belongs to the National Council for the Conservation of Plants and Gardens (NCCPG). Being a national collection holder brings with it a number of duties and responsibilities. Firstly, you should grow all of the *taxa* that can be grown in your garden. We therefore strive to grow all of the hardy euphorbias and their subspecies and varieties. We grow some cultivated varieties (cultivars), but when it comes to *Euphorbia characias*, there are real doubts over the identity of many of its cultivars.

This is a naturally very diverse species. It was formerly thought that *E. characias* is just a shrubby plant, with black hornless nectaries (the small glands that provide a reward to visiting animals), that grows at the western

end of the Mediterranean. A similar plant with yellow-horned nectaries, which grows at the eastern end, was called *Euphorbia wulfenii*. At a certain point, it was noted that where these two species meet in Italy, the nectaries can be black with horns of yellow—or they can be every possible combination in between because the two species are fully compatible and interbreed freely. Thus it seemed clear that the plants previously assigned to two separate species were all members of the same species. Since the western plant was named first, the eastern population was reduced to the rank of subspecies. Later it was realized that the populations at the two ends of the Mediterranean Sea were not uniform and not really distinct from one another. Later still, when gardeners started to hybridize and select cultivated varieties, the splitting of the species into subspecies became meaningless.

This diversity in cultivation is due, in part, to the high levels of viability in the seeds of *E. characias*. It is easy and tempting to propagate the cultivars by seed rather than by cuttings, but they do not come true from seed. I was once told by a highly reputable English nurserywoman that they did come more or less true from seed. This struck me as unlikely, so to test it, one of my undergraduates carried out a project in which she compared DNA sequences from plants nominally of the same *E. characias* cultivar and found none of them to be the same. It is safe to assume that unless the *E. characias* cultivar is being grown for its foliage, it will not be the same as the original. But it might be a *better* plant.

The second responsibility of the national collection holder is to label the plants clearly and to open the collection for public viewing on at least two days each year, although many such collections are open more often. The Oxford euphorbias can be viewed on every day except Good Friday and Christmas Day. Thirdly, the collection should be

photographed and deposited in recognized herbariums.

Finally, the rarest species should be propagated and distributed. This we have been doing for a number of species, including *Euphorbia stygiana*—an island endemic from the Azores (that is to say, it grows on the Azores and nowhere else). As such, it is vulnerable to changes in its habitat because it cannot migrate easily to adjacent land. Furthermore, it is shy to produce seedlings. This is true also when it is cultivated in Oxford. For a number of years we have been trying to learn about the reproductive biology of this species, and this is what we know so far: *E. stygiana* is self-compatible and produces seeds of which 95 percent are viable. This is assisted by the fact that euphorbias do not have specialized pollinator relationships and welcome the attention of any passing pollinating animal. The seeds, which do not germinate immediately and remain dormant for six months, are lost when allowed to fall on the soil around parent plants—a trait that is assumed to be retained from the plant's Mediterranean origins. They will germinate under glass after six months, but we have been successful in raising only two seedlings outdoors.

Predatory Wrens

The question is, "What prevents all these viable seeds from germinating in our soil?" We have demonstrated that there is nothing in the soil to prevent them from germinating. It appears that the Garden's wrens prey upon the seeds. These small birds are very common and normally eat insects. But our birds prefer euphorbia seeds, and not just any euphorbia seeds; they prefer *E. stygiana* seeds to those of any other species. Since killing the wrens is not an option, we can only establish a translocated population. The clue as to how to do this may come from the two seedlings: One emerged from under a rock in the Rock Garden, and the other from underneath a

fence. In both places, these seeds would have been inaccessible to the wrens, as well as the mice that we know also take the seeds. If we can cover the soil with a mulch of coarse scree, into which the seeds can fall out of reach of predators, then we shall have provided an insurance policy for this vulnerable species.

One other complication has emerged during the investigation into the reproductive biology of *E. stygiana*. We now know that *E. stygiana* hybridizes with *E. mellifera* if the two species are grown next to each other. The hybrids are distinct from their parents and produce viable seeds, so it was decided that they should be named legitimately; they are now known as *Euphorbia × pasteurii*, named after the undergraduate who showed conclusively that they are hybrids. Whether we have three distinct species here, or one variable species, depends on how you define a species.

It is often suggested that one man's weeds are another man's euphorbias. The University of Oxford Botanic Garden had a good collection of euphorbias before the establishment of the NCCPG because they can be used for teaching so many parts of the Biological Sciences degree. Every garden could have a good collection of them, because there is one for every situation. They may never be the stars of the show, but they are invaluable members of the supporting chorus. ~

TIMOTHY WALKER is the horti praefectus (director) of the University of Oxford Botanic Garden. He has written for the "Bulletin" on the healing power of plants in the Summer 2007 issue, and on the early history of the University of Oxford Botanic Garden in the Summer 2004 issue.

Resources: For more information on the University of Oxford Botanic Garden, visit www.botanic-garden.ox.ac.uk



MALUS—A Four-Season



ABOVE: *Malus 'Golden Raindrops'* (Photo: J. Frank Schmidt & Son Co.)

RIGHT: *Malus 'Jewelcole' Red Jewel™* (Photo: J. Frank Schmidt & Son Co.)

Wonder for Pacific Northwest Gardens

BY LORENE EDWARDS FORKNER

Best known for brief, delicate yet abundant blooms, the crabapple tree (*Malus* sp.) displays garden appeal long past late spring, when its fallen white, pink or rosy-red flowers spangle the ground like confetti. In fall, many offer colorful foliage and jewel-like fruits, making them year-round stars in the Pacific Northwest garden.

There are crabapples for every landscaping need because they range in form from dense, shrub-like specimens to slender, vase-shaped



small trees, to good-sized climbing trees with spreading canopies. Flowers, form, fall color and fruit! This woody ornamental is a boon for the city gardener who must judiciously juggle high expectations with limited planting space, overhead wires, pollution and less-than-ideal soil conditions. Add to this hit list of attributes the fact that crabapples are wildlife-friendly and provide valuable pollinator support, and you have today's darling: an eco-green star.

Crabapples thrive in full sun and prefer a good, well-drained garden soil of moderate fertility. Hardy in USDA zones 4 through 8,

these sturdy plants will also adapt to mildly acidic or alkaline and rocky soils and prove quite drought tolerant once they become well established. Some pruning is necessary to develop good frameworks on young trees, and to remove dead wood on older trees; excess pruning may result in the development of unsightly water sprouts as well as a lessening of flower bud production for the following year.

Diseases and pests are few. Basically, they are the same as those that affect apples: codling moths, tent caterpillars, scab, powdery mildew and crabapple rust. While these diseases and

THE CRABAPPLE HIT PARADE

The following crabapples have been selected by Great Plant Picks—the educational awards program developed by the Elisabeth C. Miller Botanical Garden of Seattle—to assist home gardeners in identifying superior plants for their Pacific Northwest gardens.

Malus 'Adirondack'—Consistently rated across the country as a superior crabapple for its upright form, heavy and persistent fruit set, and disease resistance. Profuse crimson buds opening to sparkling-white flowers clothe this slow-growing and nearly columnar small tree. Fruits are red to coral, one-half-inch in diameter, and endure well into the winter. Growth habit: nine feet by five feet in 10 years and 18 feet by 10 feet at maturity.

M. 'Jewelcole' Red Jewel™—An excellent, disease-resistant small tree with white buds opening to brilliant-white, single flowers. Consistently heavy crops of small, cherry-red fruit persist on branches throughout the winter. It is an outstanding street tree and looks beautiful in formal plantings, where its upright pyramidal form and small size are in scale with urban landscapes. Growth habit: eight feet by six feet in 10 years and 15 feet by 12 feet at maturity.

M. toringo ssp. *sargentii* 'Tina'—This dwarf crabapple produces an abundance of bright-red buds that open to single, white flowers; a profusion of one-quarter-inch, cherry-red fruits follow. With a compact form that is more shrub-like than tree-like, 'Tina' is often grafted on a four- to five-foot-tall trunk for a topiary effect and is suitable for small gardens and container plantings. Growth habit: five feet by six feet at maturity—taller if grafted.

M. 'Strawberry Parfait'—A heavy crop of cherry-red buds opening to large, pale-pink flowers outlined in darker pink smother the sprawling crown of this showy crabapple. Spring foliage emerges reddish purple and ripens to a deep green by summer. The summer foliage sets off a bountiful crop of persistent, garnet-colored fruit. Growth habit: nine feet by 10 feet in 10 years and 18 feet by 20 feet at maturity.

M. transitoria 'Schmidtcutleaf Golden Raindrops™'—In spring, star-like constellations of small, white flowers produce an abundant cop of golden-yellow fruits. But this crabapple is at its showiest in autumn, when the fruits become lightly burnished with red after a hard frost. Finely divided, deep-green foliage and spreading slender limbs impart a delicate appearance to the tree's elegant, upright form. Growth habit: 10 feet by eight feet in 10 years and 20 feet by 15 feet at maturity.



Malus 'Adirondack' (Photo: Richie Steffen)

pests are easily controlled with an organic spray/trapping program, a wise gardener selects resistant cultivars known to thrive in our Pacific Northwest garden conditions.

Washington Park Arboretum is the home of a significant *Malus* collection, with some 100 specimens located throughout its 230 acres. Just a short walk south of the Graham Visitors Center to the east of Arboretum Drive East is a small, informal allée of aged crabapples. A fall walk through this section of the Arboretum offers a rich sensory experience. The smell of ripe fruit, the shimmering of golden leaves and the feel of spongy, humusy earth underfoot, they all contribute to a sense of autumnal fecundity. On a later, mid-winter visit, the scene reduces to countless shades of grey and silver, with sporadic clusters of persistent red fruit still hanging on the rain-glistened branches. (A special knockout is a young *Malus 'Adirondack'* sited on the entry lawn of the Graham Visitors Center. From tip to toe, it sports brilliant, coral-pink beads of one-half-inch fruits that glow against the leaden skies of late December.)

Characterized by the "Sunset Western Garden Book" as ". . . among the most useful and least troublesome of flowering trees," crabapples are useful additions to the home landscape. Whether placed in a mixed border to establish a stunning focal point, lining a drive to create a gracious and ever-changing welcome, sited as a single lawn specimen, or espaliered against a sunny wall, the crabapple contributes four seasons of beautiful interest.

L.M. Montgomery—the Canadian author best known for her Anne of Green Gables series—poetically suggests that amethysts are the souls of good violets. Perhaps rubies are the heavenly reward of the lovely crabapple tree. ~

Seattle-based writer and garden designer **LORENE EDWARDS FORKNER** seeks a life that blends and balances her passions: travel, good food, family and friends, and all things horticultural. Lorene is a member of the "Bulletin" editorial board and may be reached at www.Plantedathome.com.

KNOWING THE SPRING COURTYARD

The Seattle Chinese Garden Begins to Take Shape



BY PHIL WOOD

When I visited my first Chinese garden on a trip to Vancouver, B.C. several decades ago, I discovered a place that echoed a rich culture—one that provided complex sensory experiences based on delightful garden spaces. Its paths, courtyard and shelters interwove with plants, water and sky. I felt as if a marvelous secret had been kept from me. Well, pass it on. We who live in Seattle are about to be let in on that secret. We are building our own Chinese garden.

The Seattle Chinese Garden's first large construction, the Knowing the Spring Courtyard, will sit on a magnificent site at South Seattle Community College (SSCC) in West Seattle, overlooking the city skyline, Elliott Bay and the Cascade Mountains.

The Knowing the Spring Courtyard, 70 feet long by 50 feet wide, will be the entry court to the 4.6-acre garden. Until the rest of the garden is built, it will serve as an introduction to the entire future site, as it displays all the features essential to a Chinese garden. In one corner a pond will be the starting point for



重庆市园林建筑设计院 2007.04

the stream that will lead though the garden. Our sister-city in China, Chongqing, donated a grand entry gate. The courtyard walls will feature leak windows, so named because they let in light and “leak” views through their carved scrollwork.

The word “garden” only begins to describe the scope of a Chinese garden. Far more than western gardens, those in China are a mix of architecture, plants, stone and water that creates a place for people to meet, take pleasure, learn and interact with the natural world. Our Seattle garden will be all of that.

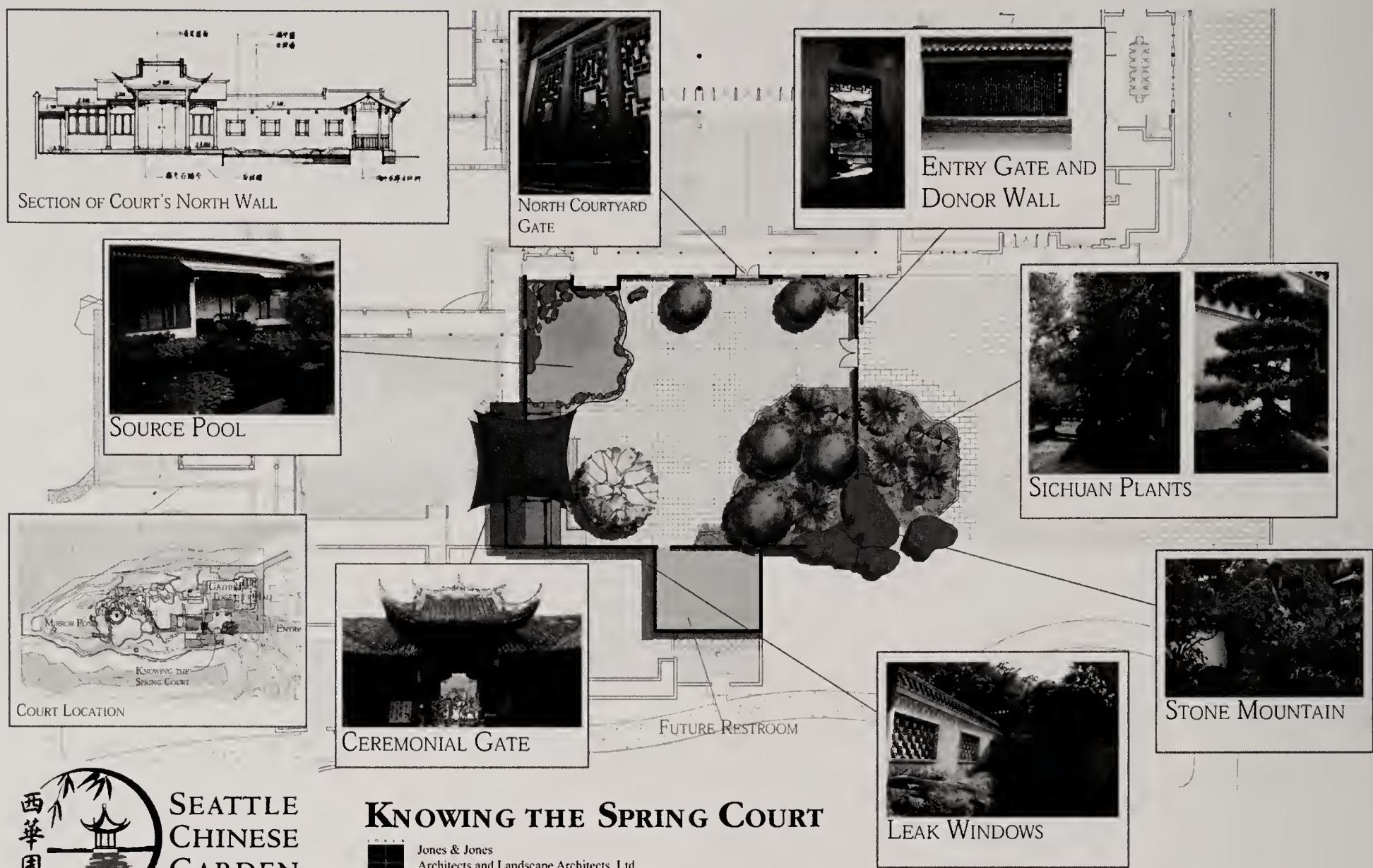
LEFT: The Seattle Chinese Garden’s Knowing the Spring Courtyard includes all the major elements to be found in a Chinese garden—stone, water, plants and architecture. The completed Garden will feature three more major courtyards: one adjoining a banquet and exhibition hall, one in front of a scholar’s study, and one containing a collection of *penjing*—or Chinese-style *bonsai*. (Image: Chongqing Municipal Bureau of Parks and Greenery)

When completed, the garden will have a teahouse, spaces for displaying Chinese arts and crafts, and a banquet and meeting hall that will provide a place for weddings and celebrations.

In a country as large as China, there is not just one Chinese garden tradition. At the imperial gardens in Beijing, rulers built vast compounds that served the functions of the emperor’s court. Six hundred miles to the south, around Shanghai, scholar-bureaucrats built gardens on a more domestic scale. Many of these have been preserved in Suzhou—a city near Shanghai that is renowned as China’s Garden City.

A third style of Chinese garden developed in Sichuan Province, sited 900 miles west of Shanghai. The Seattle Chinese Garden will be in the Sichuan style, which is based on garden traditions that grew out of temple gardens and memorial gardens dedicated to poets. Garden designers from Chongqing created the plans for our garden. (Historically a part of Sichuan Province, Chongqing recently became an independent city reporting directly to the central government. Chongqing, like Seattle, is a port city, connected to the ocean by the Yangzi River, whose navigation will be tamed by the Three Gorges dam near Chongqing.)

The Seattle Chinese Garden will join neighboring West Coast Chinese gardens, including Portland’s Classical Chinese Garden, the Dr. Sun Yat-Sen Classical Chinese Garden in Vancouver, B.C., and a newcomer—the Chinese Garden currently being built at the Huntington Botanic Gardens near Los Angeles.



SEATTLE
CHINESE
GARDEN

KNOWING THE SPRING COURT

Jones & Jones
Architects and Landscape Architects, Ltd.

All three of these gardens are in the Suzhou style, based on scholars' gardens. Seattle's garden will be the first garden built in the Sichuan style outside of China and will have a more rural feeling. Along with courtyards, it will have a gorge filled with rushing water, a large lake and a "mountain" capped by a three-story pavilion.

The Seattle Chinese Garden will offer a full education program to the public that will include classes on horticulture, cooking, and the arts and culture of China. Further educational opportunities will arise through the garden's close association with SSCC, which plans to use it as a resource for the college's program of Asian studies.

The Seattle Chinese Garden Society, a private non-profit corporation charged with building the garden, has raised funds from the

City of Seattle, King County and Washington State, as well as corporations and individuals. Yangming Chu, the society's executive director and chief curator, is enthusiastic about the future. "This garden represents the most exciting cultural project in Washington State," Chu says. "It is truly a symbol of the connection both between Seattle and Chongqing and between our country and China."

To create the Knowing the Spring courtyard, artisans from China will arrive in spring of 2009 to transform the underpinnings built by the Seattle contractor, Krekow Jennings Inc. Twenty container loads of carved windows, paving stones, roof tiles and entry gates—fabricated in China and already shipped across the Pacific Ocean—will transform concrete walls, blank openings for windows and doors, and bare soil into a garden inspired by a country

halfway around the world. Seattle-based Jones and Jones, Architects and Landscape Architects, is consulting with the Chongqing designers and the Society to ensure a proper growing environment for the garden's and courtyard's plants.

And for many of us, the excitement will be in the plants. The Chinese designers have selected those in the Knowing the Spring Courtyard for the symbolic meaning they have in Sichuan gardens. One of them, camphor laurel (*Cinnamomum camphora*), reaches great stature and age in Sichuan courtyards. Although it may not be reliably hardy here, the designers deem it of such importance that a large specimen will be obtained in California, as an older specimen has a better chance of surviving than a sapling. Also in the courtyard will be golden rain tree (*Koelreuteria paniculata*), the Yulan magnolia (*Magnolia denudata*), Chinese crabapple (*Malus spectabilis*), flowering plum (*Prunus mume*) and Chinese elm (*Ulmus parvifolia*). Two pines are on the list: Chinese pine (*Pinus tabulaeformis*) and Japanese white pine (*Pinus parviflora*). The latter, although native to Japan, has long been cultivated in Chinese gardens.

Bamboo grows in extensive groves in Sichuan gardens and will find space to roam in the Seattle Chinese Garden. It will be represented in the Knowing the Spring Courtyard

by *Phyllostachys vivax* and Incense bamboo (*Phyllostachys atrovaginata*), planted along the interior courtyard walls. The garden also will feature a collection of perennials from Sichuan Province.

Those involved in discussions about plants at the Seattle Chinese Garden have had time to speculate about the possibility of the garden being a showcase for flora of China other than the plants traditionally seen in Chinese gardens. Many of the Chinese plants we currently grow in our gardens in Seattle were collected from the wild and were not used traditionally in China. And there are many other ornamental plants growing wild in Sichuan landscapes with which western gardeners are not yet familiar. One idea is that traditional plants could be used in the formal courtyards, and non-traditional ones could be mixed into the less-structured areas of the garden. As the garden expands, and the plants respond to the site, we can all look forward to the Seattle Chinese Garden continuing to pass on its secrets. ~

PHIL WOOD is a garden designer and a garden writer. He has served on the board of the Seattle Chinese Garden Society and the Arboretum Foundation. His two daughters were born in Jiangxi Province in China.

TOURS

A SPECIAL TOUR OF THE KNOWING THE SPRING COURTYARD WILL BE CONDUCTED BY PHIL WOOD AND JAN WHITNER FOR READERS OF THE WASHINGTON PARK ARBORETUM BULLETIN. FOR FURTHER INFORMATION, PLEASE CONTACT JAN AT janwhitner@msn.com.

Tours of the Knowing the Spring Courtyard for the general public can be arranged by calling the office of the Seattle Chinese Garden Society at (206) 282-8040. For more information on the garden project, visit www.seattlechinesegarden.org.

The Seattle Chinese Garden Society currently is fundraising to complete the Knowing the Spring Courtyard; naming opportunities are available. Please call the Seattle Chinese Garden Society office at (206) 282-8040 for more information.



1

Hakusasano, Kyoto. (Photo: Dewey Webster)



2

Yu Yuan, Shanghai. (Photo: Steve Whitner)



3

Temple Garden, Leshan. (Photo: Steve Whitner)



4

Temple Garden, Leshan. (Photo: Steve Whitner)



5

Shukkei-en, Hiroshima. (Photo: Dewey Webster)



6

Tenryu-ji, Kyoto. (Photo: Dewey Webster)

What *is* the Difference Between Japanese and Chinese Gardens?

BY GANG CHEN

Award-winning architect Gang Chen addresses this frequently posed question in his recently published book, “Planting Design Illustrated.”

Images drawn from Washington Park Arboretum’s Japanese Garden and various mainland Japanese and Chinese gardens illustrate the author’s discussion, which has been summarized under several distinct subject headings.

In the early seventh century C.E., the beauty of the emperor’s royal gardens astonished Japanese envoys to the Chinese imperial court. During the next 200 years, the Japanese imported, more or less intact, Chinese garden styles into their own island nation, which had no native gardening tradition of its own. Subsequently, however, each country’s gardening style evolved along a separate path, responding to its unique climate, geography, history and culture. Today, while the two garden styles demonstrably stem from a common ancestor, their respective uses of garden architecture, rocks and plants achieve strikingly different effects.

Garden Size and Layout

❶ Japanese gardens, which are often designed to achieve maximum artistic effect in concise spaces—and to be seen from inside the house—emphasize the beauty of the static view.

❷ Chinese gardens typically occupy larger spaces and their designs emphasize movement through the garden to achieve multiple changes of view.

Garden Architecture

❸ ❹ Today, Chinese garden architecture emphasizes curved roof hips and eaves, colorful finishes, and many different types of structures such as covered walkways, pavilions and chambers.

❺ ❻ Japanese garden architecture exhibits relatively straight hips and eaves, large overhangs of the eaves, natural surfaces and many fewer structures.



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7 Garden walls in China, often used as backgrounds to show the lines and shadows of plants in the sunlight or moonlight, are built high to prevent outsiders from looking in.

8 The walls of Japanese gardens are built lower and typically are more visually "porous."

The Garden Floor

9 In Japanese gardens, pavement, gravel, pebbles, stepping-stones, moss and ground-covers form the floor; the soils are rarely exposed.

10 In Chinese gardens, the floor is composed of pavement, groundcover and (in arid North China) swept earth; pavement is made of tiles, bricks and broken pieces of china arranged to form geometric patterns or the shapes of flowers or animals.

Stone Types

11 In Chinese gardens, the stone is often a sedimentary type—limestone or sandstone—that shows signs of being eroded by water over time, exemplifying the Daoist teaching that "soft things overcome hard things." Stones typically are piled up in large arrangements to symbolize cliffs, peaks or remote mountains. They are often planted with shrubs, trees and vines to form the main feature in the garden.

12 In Japanese gardens, the stones are relatively smooth, heavy and dense; typically metamorphic granites and cherts are used. Stone arrangements usually are less massive than the stone arrangements in Chinese gardens; they are carefully half-buried into the landscape and often set off by smaller stones, gravel or moss.



7

River Viewing Garden, Chengdu.
(Photo: Steve Whitner)



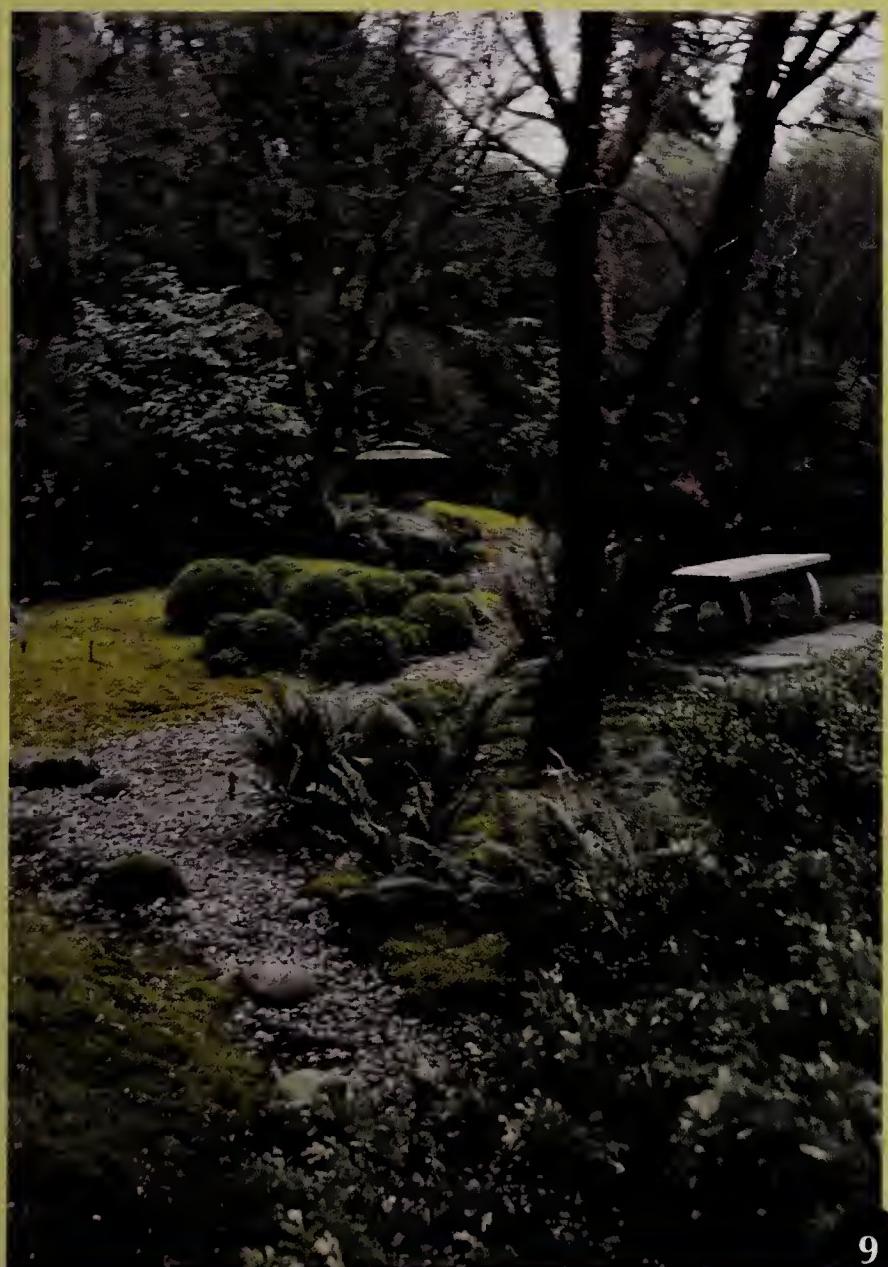
8

Katsura Rikyu, Kyoto.
(Photo: Dewey Webster)



10

Japanese Garden,
Washington Park Arboretum



9

North Hot Springs Park, Chongqing.
(Photo: Steve Whitner)



11

Embroidery Institute Garden, Suzhou.
(Photo: Steve Whitner)



13

Toji-in, Kyoto. (Photo: Dewey Webster)



15

Du Fu's Cottage, Chengdu.
(Photo: Steve Whitner)



12

Japanese Garden,
Washington Park Arboretum



14

Great Mosque, Xi'an. (Photo: Steve Whitner)



16

Magnolia denudata,
Washington Park Arboretum

Plants

The two garden styles use many plants in common but handle them differently:

- ⑬ In Japanese gardens—where a shrub's foliage is deemed more important than its flowers—shrubs are pruned into shapes to achieve an ideal form of “perfect beauty.”
- ⑭ In Chinese gardens, trees and shrubs are pruned to create a naturalistic look, and their flowers, fruits and foliage are showcased.

Selection of Plants

Both Japanese- and Chinese-garden styles value plants that are graceful and exhibit unusual growth patterns. Both styles also limit their plant palettes, but perhaps for different reasons:

- ⑮ Chinese gardeners often select plants for their symbolic meaning. Here a stand of bamboo symbolizes both resilience and family connection.
- ⑯ Japanese gardeners are more likely to select plants for their abstract beauty. ☺

GANG CHEN holds a master's degree from the School of Architecture, University of Southern California and is a recipient of the Grace and Robert Frazer Landscape Heritage Award from the Landscape Architecture Foundation. He currently practices in California and has recently published “Planting Design Illustrated” (Denver: OutskirtsPress, Inc.)



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New Books from Pacific Northwest Writers

BY BRIAN THOMPSON

The Arboretum's Wetlands

This year's annual review of books by local authors starts in the Arboretum! "The Wild Within" is a photo collection highlighting the wetlands—with a special emphasis on the animals—of the Washington Park Arboretum. The book was introduced in the Winter 2008 issue of the "Bulletin" with several photographs and excerpts from the opening essay.



But that was only a sample. You must get the book to appreciate the whole presentation and the simple

eloquence of the layout. It is a real page-turner—but you will return to savor the pages frequently as you gain an ever-deepening appreciation of the value of our Arboretum.

Essays, which provide occasional breaks in the photographs, are well worth reading. Notables Dale Chihuly, Dan Evans, Peter Steinbrueck, William Ruckelshaus and others put aside their public faces to give very personal accounts of the importance of the Arboretum. Best of all, by buying this book you support the Arboretum Foundation, which receives the proceeds from its sales.

It is quite remarkable that this area also would be the subject of a recent self-published book by Seattle Times photographer Tom Reese. "The Last Oasis" extends a bit beyond the Arboretum in its scope to include human subjects and their impact, some of which is

benign, and some troubling. However, the message in both of these books is much the same: these urban wetlands are a treasure and their preservation is critical.

Native Plants

For gardeners, the most important new book of the year will be the "Encyclopedia of Northwest Native Plants for Gardens and Landscapes." A trio of southwest Washington writers brings together extensive experience in botany, propagating and growing native plants, and photography in this very comprehensive and extensive book that will be a standard reference for many years to come.

A brief introduction lays the ground rules: the book includes only natives—and no plants that have been naturalized since the arrival of "non-indigenous human explorers." Plants that are rare and nearly impossible to grow in cultivation, such as the various lovely—but sensitive—slipper orchids, are out, too.

There seem to be some exceptions to this last rule, such as *Erythronium montanum*, the stunning but notoriously difficult-to-cultivate avalanche lily seen at Hurricane Ridge. (However, as the authors note, gardeners who live at higher elevations can grow it.)

The heart of the book is a listing of over 500 species that gives each plant's basic description, cultivation requirements, native range *and* habitat; in addition each entry includes notes about related species, ethnobotany and selected varieties. Propagation tips are included, with a strong emphasis on conservation of plants *in situ*.

The excellent photographs make this a pretty good identification book, and they also will convince you to add more natives—including ferns, shrubs and trees (both broadleafed and conifers)—to your home garden. The appendices include helpful lists of plants to meet various gardening needs: for shade, for wildflower meadows, for hummingbirds, etc. This book is a must have!

Serious students of native plants will find "The Flora of Mount Adams, Washington" to be an important work. Mount Adams is considered to have the most diverse flora in the state, and it hosts several quite distinct habitats and over 800 species of plants. As this book includes no photographs and offers only botanist-oriented descriptions and identification keys, it is not for casual seekers of wildflowers. They should look, instead, for co-author Susan McDougall's "The Wildflowers of Mount Adams, Washington"—a photographic field guide that was reviewed in the Fall 2006 issue of the "Bulletin."

Excellent photographs are the outstanding quality of "Uncommon Beauty," a new field guide focused on an underexplored part of the Pacific Northwest—southeastern British Columbia. Written by enthusiastic outdoorsman and native of the area Neil L. Jennings, it provides a very readable description of over 200 plants, many of which have ranges that extend southward into Eastern Washington.

Also from British Columbia

Steve Whysall has been a regular garden writer for the Vancouver Sun for 15 years. "Best Plant Picks" includes trees, shrubs, perennials, bulbs and ferns discussed in his more recent columns and organizes them in a gardening calendar that includes tips on monthly chores and seasonal highlights. This layout forces the reader to visualize all elements of the garden each month, so that in January the towering Colorado blue spruce and the colorful primrose get equal consideration. This book is a good

choice for a new gardener who is willing to experiment.

Based on his earlier, high-energy books, it is not hard to imagine Des Kennedy as the author of a book entitled "The Passionate Gardener." With wicked humor and remarkable insight into both gardens and gardeners, he includes chapters that warn of the seven deadly sins of gardening and extol its ten commandments. Other chapters in the book are more reflective than these, but Kennedy is always ready to see the irony and contradictions in how we conduct our favorite pursuit.

He also displays a knack for travel writing—making trips to Hawaii, Ireland and New Zealand entertaining, while packing in a lot of names and facts that would be handy for planning your own trip. This is the perfect reading companion for a winter's evening. And between the laughs, you just might soak up some good, sound gardening counsel based

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on the author's years of gardening in the British Columbia Gulf Islands.

A Bit Farther South

Straddling the U.S./Canadian border are the publications of Lone Pine, a press that presents authors from both countries. Three recent titles—"Water Garden Plants," "Container Gardening" and "Herb Gardening"—each address Washington and Oregon but certainly are applicable to areas further north, too. These are very useful titles for beginners, and they feature the Lone Pine trademark: water-resistant covers and easy, travel guide-style presentation. Stock up on them for the new gardeners you know.

A unique new addition to the Elisabeth C. Miller Library collections is "Holden Village Historic Iris," an account of the survival of garden irises originally planted in the village of a mining camp that operated near the upper end of Lake Chelan from 1937–1957. Now established at a nearby Lutheran ministry known as Holden Village, these irises are living history. Grown by the wives of the miners, many of them survived in abandoned gardens untended for more than 40 years.

Newer varieties were added after the Village was established in the early 1960s, but as is the case with the older varieties, the "real" names of these newer varieties now are mostly unknown. Authors Roxanne Grinstad and Larry Howard (the latter a garden volunteer at the Center for Urban Horticulture) share the local names that reflect the plants' place in the community—names that are evocative of both the present day and the history of the area.

New Editions of Classics

Arthur Lee Jacobson's "Wild Plants of Greater Seattle" was received with great excitement when published by the author in 2001. (See a full-length review by Ray Larson in the Summer 2002 issue of the "Bulletin.") In this year's second edition, the author has added

15 new plants to the illustrated field guide, plus more than 100 to the annotated checklist; in addition, much of the nomenclature throughout the book has been corrected or updated.

Another important contributor to our Pacific Northwest literature has been Steve Solomon, who now offers his sixth edition of "Growing Vegetables West of the Cascades." Each edition reflects the author's ongoing learning of his craft; the major change in this edition concerns the cultivation of asparagus. Solomon now advocates growing it from seed, rather than starting with root crowns.

Finally, Ann Lovejoy has updated her popular 2004 "Handbook of Northwest Gardening" with a new appendix entitled "What's New in Sustainable Gardening." She discusses rain gardens that capture as much naturally occurring water as possible; dry gardens that survive and even thrive with no supplemental watering once established; and the importance of bees, their current peril, and ways that gardeners can help to ensure their survival. These topics are all good additions.

Where do I find these books?

Several of this year's new books are self-published, possibly foreshadowing a growing trend. This can make them difficult to find, although direct sources are included in the bibliography. All of them can be seen at (and most can be checked out from) the Elisabeth C. Miller Library, while many are available for purchase from the Gift Shop at the Graham Visitors Center. A good winter of reading lies ahead. ~

BRIAN THOMPSON is curator of horticultural literature at the Elisabeth C. Miller Library, University of Washington Botanic Gardens and a member of the editorial board of the "Bulletin."

BIBLIOGRAPHY

- Biek, David and Susan McDougall. "The Flora of Mount Adams, Washington." Seattle, WA: Sound Books, 2007. ISBN: 978-0977628513, \$28.00.
- Grinstad, Roxanne and Larry Howard. "Holden Village Historic Iris: A History of the Community as Chronicled in Its Gardens." Self published, 2008. \$10.00 (available at Holden Village Bookstore, HCO Box 2, Chelan, WA, 98816 or email bookstore@holdenvillage.org.)
- Jacobson, Arthur Lee. "Wild Plants of Greater Seattle, 2nd edition." Self published, 2008. ISBN: 978-0962291852, \$24.95 (available at www.arthurleej.com).
- Jennings, Neil L. "Uncommon Beauty: Wildflowers and Flowering Shrubs of Southern Alberta and Southeastern British Columbia." Surrey, BC: Rocky Mountain Books, 2006. ISBN: 1894765753, \$19.95.
- Kennedy, Des. "The Passionate Gardener: Adventures of an Ardent Green Thumb." Vancouver, BC: Greystone Books, 2006. ISBN: 978-1553651987, \$16.95.
- Beck, Alison and Mark Harp. "Water Garden Plants for Washington and Oregon." Auburn, WA: Lone Pine Publishing International, 2008. ISBN: 978-9768200402, \$21.95.
- Binetti, Marianne and Laura Peters. "Herb Gardening for Washington and Oregon." Auburn, WA: Lone Pine Publishing International, 2008. ISBN: 978-9768200396, \$19.95.
- Binetti, Marianne, Don Williamson et al. "Container Gardening for Washington and Oregon." Auburn, WA: Lone Pine Publishing International, 2008. ISBN: 978-9768200419, \$19.95.
- Lovejoy, Ann. "The Ann Lovejoy Handbook of Northwest Gardening: Natural, Sustainable, Organic, revised edition." Seattle, WA: Sasquatch Books, 2007. ISBN: 978-1570615504, \$27.95.
- Reese, Tom. "The Last Oasis: Man, Beast and the Transcendent City Marsh." Self published, 2007. ISBN: 978-0615162553, \$74.95 (available at www.blurb.com).
- Robson, Kathleen A., Alice Richter and Marianne Filbert. "Encyclopedia of Northwest Native Plants for Gardens and Landscapes." Portland, OR: Timber Press, Inc., 2008. ISBN: 978-0881928631, \$49.95.
- Solomon, Steve. "Growing Vegetables West of the Cascades, sixth edition." Seattle, WA: Sasquatch Books, 2007. ISBN: 978-1570615344, \$21.95.
- Wetland Alliance. "The Wild Within: Wetlands of the Washington Park Arboretum." Seattle, WA: Documentary Media, 2007. ISBN: 978-1933245096, \$29.95.
- Whysall, Steve. "The Vancouver Sun's Best Plant Picks." North Vancouver, BC: Whitecap Books, 2008. ISBN: 978-1552859278, \$19.95.



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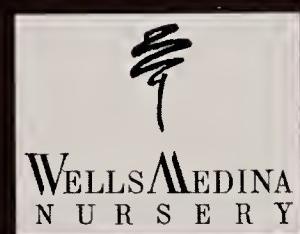
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